UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF CHEMISTRY AND SOILS
INSECTICIDE DIVISION

Patent List No.12

A LIST OF
UNITED STATES PATENTS

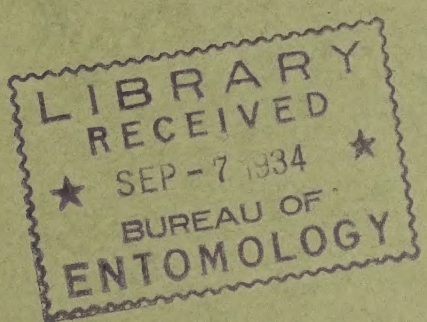
Issued from 1917 to 1933 inclusive

relating to

MACHINES FOR REMOVING INSECTS FROM PLANTS

Compiled by

R. C. Roark



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A LIST OF UNITED STATES PATENTS ISSUED FROM 1917 TO 1933, INCLUSIVE RELATING TO MACHINES FOR REMOVING INSECTS FROM PLANTS.

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Insecticide Division, Bureau of Chemistry and Soils.

Thirty of the 46 devices mentioned in this list are primarily designed for dislodging boll weevils from cotton plants, 9 are intended for use against potato bugs, 2 are for use against pea aphids, 1 for use against grasshoppers and the other devices may be used against unspecified insects. In 8 machines the insects are crushed between rollers, in 17 the insects are thrown into pans containing coal oil or other insecticide (Paris green and turpentine are mentioned), in one the insects are incinerated by a charcoal fire, and in other devices the insects are collected in a pan or other receptacle. Two of the machines are intended to apply insecticide to growing plants.

Every effort has been made by the compiler to make this list of patents complete and no discrimination is intended against any patent mention of which is inadvertently omitted.

The Department of Agriculture assumes no responsibility for the merits or workableness of any of the patents, nor does it recommend any of the inventions listed.

1,214,311 (Jan. 30, 1917; appl. Oct. 7, 1916). POTATO-BUG DESTROYER. Albert Julien, Copas, Minn. - This machine gathers potato bugs on an endless apron and mashes them with a pressure roller.

1,226,505 (May 15, 1917; appl. Aug. 19, 1916). BOLL WEEVIL EXTERMINATOR. Benjamin F. Gray, Blocton, Ala. - This machine shakes boll weevils from cotton plants into troughs containing kerosene oil.

1,236,629 (Aug. 14, 1917; appl. Mar. 28, 1917). INSECT DESTROYER. Grover C. Tucker, Tuscaloosa, Ala. - Tucker Implement Co., Greensboro, Ala. - This machine knocks boll weevils from cotton plants into collecting troughs. It is an improvement on the device disclosed in U. S. Patent 1,189,508 issued to G. C. Tucker on July 4, 1916.

1,238,188 (Aug. 28, 1917; appl. Dec. 22, 1916). INSECT COLLECTING AND DESTROYING MACHINE. Alfred Penn, New Orleans, La. - This apparatus, which may be attached to an ordinary plow, removes boll weevils from cotton plants by means of rotating brushes and deposits them in a pan containing oil or insecticide.

1,242,546 (Oct. 9, 1917; appl. June 20, 1917). BUGGING MACHINE. Martin Harmon, St. Louis, Mo. - This machine knocks potato bugs from plants and crushes them between rollers. It is an improvement over those described in U. S. Patents 755,769 issued March 29, 1904, and 890,051 issued June 9, 1908, to M. Harmon.

1,249,988 (Dec. 11, 1917; appl. July 10, 1916). POTATO BUG KILLER. Ernest L. Moeser, Golden Valley, Minn. - This machine brushes potato bugs from plants and crushes them between rollers.

1,256,552 (Feb. 19, 1918; appl. May 22, 1917). INSECT CATCHER. Luther D. Griffin, Albert J. Stewart and Gratton W. Stewart, Blocton, Ala. - This device is attached to a plow and wipes boll weevils, potato bugs, etc., from plants into a pan containing oil or other suitable insecticide.

1,257,343 (Feb. 26, 1918; appl. Jan. 10, 1917). BOLL WEEVIL EXTERMINATOR. William E. Harper, Center City, Tex. - This machine shakes infested bolls and insects from growing plants and crushes them between rollers.

1,279,476 (Sept. 17, 1918; appl. Feb. 24, 1917). INSECT GATHERING AND DESTROYING MACHINE. Frederick Stellar, Birmingham, Ala. - This machine knocks boll weevils from plants into a trough containing coal oil.

1,279,477 (Sept. 17, 1918; appl. Jan. 10, 1918). INSECT GATHERING AND DESTROYING MACHINE. Frederick Stellar, Birmingham, Ala. - This machine knocks boll weevils from plants into a trough containing coal oil.

1,285,826 (Nov. 26, 1918; appl. Jan. 3, 1918). MACHINE FOR EXTERMINATING BOLL WEEVIL. George F. Sproull, Memphis, Tenn. - This attachment to a plow consists of a "flutter wheel" which knocks boll weevils from plants into a trough containing coal oil.

1,320,237 (Oct. 28, 1919; appl. June 10, 1919). POTATO BUG DESTROYER. Albert Julien, Stillwater, Minn. - This machine brushes potato bugs from plants and crushes them between rollers.

1,334,863 (Mar. 23, 1920; appl. Aug. 29, 1917). POTATO BUG KILLING MACHINE. Albert Janssen, Sibley, Iowa. - This machine knocks potato bugs off of growing potato vines and collects them in a receptacle where they are mashed by a roller.

1,338,587 (Apr. 27, 1920; appl. Dec. 8, 1919). INSECT CATCHER. Luther Patton, West Blocton, Ala. - This machine brushes boll weevils, potato bugs and other insects into collecting pans.

1,380,351 (June 7, 1921; appl. June 10, 1920). BOLL WEEVIL EXTERMINATING DEVICE. John M. Cape, San Marcos, Tex. - This machine knocks boll weevils into a pan containing a suitable insecticide.

1,383,422 (July 5, 1921; appl. Oct. 15, 1920). BOLL WEEVIL CATCHER. Alex Ploch, Carpenter, Tex. - Seven-eighths to Theodzia Ploch, Carpenter, Tex. - This machine knocks boll weevils into a pan containing water and oil.

1,396,345 (Nov. 8, 1921; appl. Sept. 1, 1920). INSECT CATCHER. William C. Ryan and Grover C. Ruhmann, Kenedy, Tex. - This machine knocks boll weevils, potato bugs, etc., from plants into a pan containing an insecticidal liquid.

1,398,599 (Nov. 29, 1921; appl. May 20, 1921). BOLL WEEVIL ERADICATOR. George W. Mobley, Waynesboro, Ga. - This device, which is adapted to be mounted upon a plow beam, knocks boll weevils from plants into a trough containing an insecticidal liquid.

1,415,358 (May 9, 1922; appl. Sept. 28, 1920). BUG EXTERMINATOR. Walter A. Johnson, Rochester, Minn. - Pioneer Manufacturing Co., Albert Lea, Minn. - This machine consists of a wheeled frame designed to be pushed forward over a row of potato plants. A rapidly rotating rapper frame brushes the bugs into receiving pans which contain poisonous liquid such as kerosene, Paris green or turpentine.

1,415,359 (May 9, 1922; appl. Nov. 29, 1920). POTATO BUG EXTERMINATOR. Walter A. Johnson, Rochester, Minn. - Pioneer Manufacturing Co., Albert Lea, Minn. - This machine is designed to be pulled forward over a row of potato plants. Bugs on the plants are brushed off by a revolving drum and fall into pans which contain poisonous liquid such as kerosene, Paris green solution, or turpentine.

1,435,656 (Nov. 14, 1922; appl. Mar. 11, 1922). INSECT DESTROYER. James P. Owens, Weatherford, Tex. - This machine is designed to knock insects, more particularly cotton boll weevils, from growing plants, incinerating them by means of a charcoal fire.

1,457,420 (June 5, 1923; appl. Aug. 19, 1922). POTATO BUG AND APHIS EXTERMINATOR. Frederick W. Bender, Cape Charles, Va. - This machine agitates plants as it is drawn over a row of them and sucks the insects into a collecting bag.

1,459,396 (June 19, 1923; appl. Feb. 11, 1922). INSECT DESTROYER. Ragnar O. Heggelund, Lake Preston, S. Dak. - This machine is designed to gather and destroy potato bugs. The insects are knocked off the plants by a revolving paddle wheel and are crushed between rollers.

1,484,270 (Feb. 19, 1924; appl. Feb. 5, 1923). BOLL WEEVIL ERADICATOR. George W. Mobley, Waynesboro, Ga. - This boll weevil eradicator shakes the insects into a trough containing insecticide, and is also provided with means for spraying suitable insecticide upon the plants.

1,499,981 (July 1, 1924; appl. Sept. 26, 1922). BOLL WEEVIL COLLECTOR. Joseph H. Hancock, Scottsboro, Ala. - This boll weevil destroyer is designed for ready attachment to a cultivator, and when drawn along a row of plants dislodges the weevils by shaking the plants. The weevils fall into pans and are killed by coal oil or other suitable liquid.

1,504,474 (Aug. 12, 1924; appl. Oct. 23, 1922). BOLL WEEVIL GATHERER AND DESTROYER. Gette W. Holmes, Hosston, La. - A machine which can be driven between rows of cotton plants is provided with oppositely revolving members for knocking the insects from the tops of the plants into a pan containing water and oil.

1,509,093 (Sept. 23, 1924; appl. June 13, 1922). INSECT DESTROYING MACHINE. Allen E. Babcock, Exeland, Wis. - This machine is designed to remove potato bugs, green hoppers, and other insects from plants and catch them in a pan containing a poisonous liquid of any suitable character.

1,511,979 (Oct. 14, 1924; appl. Sept. 4, 1923). COMBINED CULTIVATOR AND BOLL WEEVIL EXTERMINATOR. John M. Pope, Norman Park, Ga. - This device may be attached to a plow and is designed to dislodge boll weevils and cause them to drop into a pan containing oil.

1,514,020 (Nov. 4, 1924; appl. Apr. 14, 1923). INSECT EXTERMINATOR. Paul R. Sledge, Jr., Augusta, Ga. - This device consists of a wiper in the form of strands of rope or cotton fabric. As the machine moves along a row of plants the wiper revolves and distributes insecticide over the plants.

1,530,046 (Mar. 17, 1925; appl. May 12, 1923). BOLL WEEVIL CATCHER. John H. Hamby, Cumming, Ga. - This device knocks boll weevils from plants and crushes them.

1,532,215 (Apr. 7, 1925; appl. Dec. 24, 1923). BOLL WEEVIL TRAP. Owen C. Woods, Waycross, Ga. - One-fourth to Henry W. Williams, Argyle, Ga. - This machine embodies means for upturning the leaves, blooms and squares of the cotton plants and subjecting the under sides thereof to the action of rotary brushes for dislodging the weevils into receiving pans, and for then drawing them by air suction into a receiving sack.

1,534,219 (Apr. 21, 1925; appl. Oct. 6, 1923). BOLL WEEVIL EXTERMINATOR. Rhesa F. Kennedy, Hattiesburg, Miss. - This hand propelled machine shakes boll weevils from plants into a receiving trough.

1,550,898 (Aug. 25, 1925; appl. Aug. 31, 1923). INSECT GATHERING MACHINE. James T. Fuller, Dallas, Tex. - This machine has revolving brushes for dislodging the insects from the plants and casting them into conveyors which carry them to elevators and the latter deposit them in a receptacle.

1,562,627 (Nov. 24, 1925; appl. Dec. 23, 1924). INSECT KILLING ATTACHMENT FOR AUTOMOBILES. Sir J. Franklin, Beaver City, Nebr., and Roy W. Tracy, Brewster, Kans. - This device may be attached to an automobile and is intended for use in alfalfa, potatoes, grain and other crops. Grasshoppers flying up are knocked into a pan and there killed by a beater.

1,575,072 (Mar. 2, 1926; appl. Sept. 15, 1923). INSECT DESTROYING MACHINE. Samuel H. Manly, Granbury, Tex. - This machine shakes boll weevils from plants into pans.

1,583,434 (May 4, 1926; appl. Apr. 16, 1925). BOLL WEEVIL EXTERMINATING MACHINE. Newton L. Abercrombie, Drew, Miss. - One-half to Andrew M. Cargile, Summerland, Miss. - This machine knocks boll weevils from plants and crushes them. It is an improvement over the one described in U. S. Patent 1,488,140 issued March 25, 1924, to N. L. Ambercrombie.

1,603,493 (Oct. 19, 1926; appl. July 6, 1923). INSECT DESTROYING MACHINE. James P. Owens, Weatherford, Tex. - This machine, by means of a paddle, knocks boll weevils into a collecting pan.

1,627,796 (May 10, 1927; appl. May 8, 1926). MACHINE FOR COLLECTING BUGS. Robert Martin, Fort Francis, Ontario, Canada - This machine knocks potato bugs from plants into a receptacle.

1,660,849 (Feb. 28, 1928; appl. Sept. 13, 1927). BOLL WEEVIL COLLECTOR. Clifford H. Snow, Ferron, Utah. - This machine knocks boll weevils into a collecting pan.

1,686,394 (Oct. 2, 1928; appl. Oct. 26, 1925). INSECT GATHERING MACHINE. James P. Owens, Weatherford, Tex. - This machine knocks boll weevils, army worms and other insects from the plants into a receptacle.

1,701,718 (Feb. 12, 1929; appl. Apr. 13, 1925). APHIS REMOVING MACHINE. John E. Dudley, Jr., Madison, Wis., - One-half to Edward M. Searls, Madison, Wis. - This machine brushes aphids from pea vines into a hopper. When the bottom portion of the hopper is covered several inches deep with the insects, the temperature of the struggling mass will increase twenty to forty degrees, and the aphids will be destroyed by the heat thus engendered, and the mass may be dumped upon the ground. As the heat engendered is not enough to destroy the great majority of predators, and parasites which are so beneficial in helping to hold the aphids in check, they may be returned to the field or in time will work back to the plants.

1,710,683 (Apr. 30, 1929; appl. Feb. 27, 1928). APHIS-REMOVING MACHINE. John E. Dudley, Jr., Madison, Wis. - One-half to Edward M. Searls, Madison, Wis. - This machine brushes aphids from pea vines into a hopper.

1,714,524 (May 28, 1929; appl. Apr. 21, 1928). INSECT DESTROYER. Martin Sanchez, Nuevo Laredo, Mexico. - This machine brushes boll weevils from plants into pans.

1,717,714 (June 18, 1929; appl. Mar. 26, 1927). EXTERMINATOR. Hubert Longauer, North Milwaukee, Wis. - This machine brushes bugs from plants and crushes them between rollers. It is an improvement over those described in U. S. Patents 1,239,799, issued September 11, 1917, and 1,264,194, issued April 30, 1918, to H. Longauer.

1,724,797 (Apr. 13, 1929; appl. Apr. 13, 1928). INSECT TRAP. Albert E. Gibson, Electra, Tex. - This machine shakes boll weevils from plants into receptacles containing insecticide.

1,755,774 (Aug. 22, 1930; appl. Jan. 15, 1927). BOLL WEEVIL CATCHER. Hezakiah K. Dowdy, Cordele, Ga. - This machine shakes boll weevils from plants into a pan containing a lethal liquid.

ASSIGNEE INDEX
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